

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

Listing of Claims:

1. (Currently Amended) A method, comprising:
receiving at a first network element in a communications network a first message from a user equipment;
transmitting the first message from the first network element to a serving network element;
detecting at the first network element that the serving network element is out of service;
determining at the first network element a type of the first message, wherein determining the type of the first message comprises evaluating content of a predefined information element in the first message;
in dependence on the determined type of the first message, sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service; and
subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type.
2. (Cancelled)
3. (Previously Presented) A method according to claim 1, wherein
the second message is configured to initiate a registration from the user equipment to the first network element.
4. (Currently Amended) A method according to claim 1, wherein
a bearer configured to signal ~~for signalling~~ is established between the user equipment and the communications network prior to the receiving of the first message.

5. (Previously Presented) A method according to claim 4, further comprising forwarding the first message to a further serving network element.

6. (Previously Presented) A method according to claim 5, wherein the further serving network element registers the user equipment.

7. (Currently Amended) A method according to claim 4, wherein the bearer ~~for signalling~~ comprises a signalling or general purpose packet data protocol context bearer.

8. (Previously Presented) A method according to claim 1 wherein the communications network is an internet protocol multimedia subsystem network.

9. (Previously Presented) A method according to claim 1 wherein the first network element comprises an interrogating call session control function.

10. (Previously Presented) A method according to the claim 1, wherein the first network element comprises a proxy call session control function.

11. (Previously Presented) A method according to claim 1 wherein the serving network element comprises a serving call session control function.

12. Cancelled.

13. (Currently Amended) A method according to claim 1, wherein the detecting at the first network element that the serving network element is out of service comprises:

at least one of detecting that a predetermined time period has passed since the forwarding of the message from the first network element to the serving network element and before a response has been received from the serving network element, ~~and~~ ~~and/or~~ determining that the first message has been transmitted a predetermined number of times.

14. (Previously Presented) A method according to claim 1, wherein the type of the first message comprises a re-registration request.

15. (Previously Presented) A method according to claim 1, wherein the type of the second message comprises an initial registration request.

16. (Currently Amended) A method according to claim ~~12~~ 1, wherein the information element indicates that the first message is sent integrity protected.

17. (Currently Amended) A method according to claim ~~12~~ 1, wherein the information element indicates that a user has been successfully authenticated.

18. (Currently Amended) A method according to claim ~~12~~ 1, wherein the information element in the first message is an integrity protected flag in an authorization header of the first message.

19. (Currently Amended) An apparatus, comprising:

a ~~processor~~ controller configured to

receive a first message from a user equipment₁[[;]]

forward the first message to a serving network element₁[[;]]

detect that the serving network element is out of service₁[[;]]

determine a type of the first message by evaluating content of a predefined information element in the first message; and

in dependence on the determined type of the first message received from the user equipment

send an error message to the user equipment₁[[;]] and

subsequent to the error message being sent to the user equipment, receive a second message from the user equipment of a second type different from the first message type.

20. (Cancelled)

21. (Currently Amended) An apparatus, comprising:

a ~~processor~~ controller configured to

receive an error message from a first network element in a communications network in response to a first message, the error message indicating that a serving network element for the apparatus is out of service, and

in response to the error message to send a further message of a second type different from the first type of the first message to the first network element.

22. (Currently Amended) An apparatus according to claim 21, wherein the ~~processor~~ controller is further configured ~~arranged~~ to

establish a bearer configured to signal ~~for signalling~~ between the apparatus and a communications network comprising said first network element and said serving network element, and

respond to the error message by dropping the bearer ~~for signalling~~ between the apparatus and the communications network.

23. (Currently Amended) An apparatus according to claim 22 wherein the bearer ~~for signalling~~ comprises a signalling or general purpose packet data protocol context bearer.

24. (Previously Presented) An apparatus according to claim 21, wherein the type of the further message sent to the first network element comprises an initial registration request.

25. (Currently Amended) An apparatus, comprising:

a ~~processor~~ controller configured to

determine that a first network element in a communications network is out of service by sending a request to the first network element from the apparatus and determining that no response has been received from the first network element at the apparatus, ~~and~~

when the first network element is determined to be out of service, drop a bearer configured to signal ~~for signalling~~ between the apparatus and a communications network comprising the first network element,

discover or select at the apparatus a second network element, and
send from the apparatus to the second network element a message comprising an initial request for registration at the communications network.

26. (Currently Amended) A method, comprising:

~~receiving at~~ sending from ~~[[a]]~~ user equipment a first message to a first network element;
detecting at the user equipment that the first network element is out of service;
dropping a signalling bearer from the user equipment to a communications network comprising the user equipment and the first network element;
selecting or discovering at the user equipment a second network element in the communications network; and
sending from the user equipment to the second network element a message comprising an initial registration request.

27-33 (Cancelled)

34. (Currently Amended) A system, comprising:

a network element;
a serving network element in communication with the network element; and
user equipment in communication with said network element, ~~[[;]]~~
wherein said network element is configured to
receive a first message from the user equipment,
forward the first message to the serving network element,
detect that the serving network element is out of service,
determine a type of the first message by evaluating content of a predefined information element in the first message, and
in dependence on the determined type of the first message received from the user equipment,
send an error message to the user equipment, ~~[[;]]~~ and
subsequent to sending the error message to the user equipment, receive a second message from the user equipment of a second type different from the first message type from the user

equipment.

35-36 (Cancelled)

37. (Currently Amended) An apparatus according to claim 25 wherein the bearer ~~for signalling~~ comprises a signalling or general purpose packet data protocol context bearer.

38. (Currently Amended) A method according to claim 26 wherein the bearer ~~for signalling~~ comprises a signalling or general purpose packet data protocol context bearer.

39. (Currently Amended) A method comprising:

receiving an error message from a first network element in a communications network in response to a first message, the error message indication that a serving network element for a user equipment is out of service; and

in response to the error message, sending a further message of a second type different from the ~~first type~~ of the first message to the first network element.

40. (Previously Presented) A method according to claim 39, wherein the further message is configured to initiate a registration from the user equipment to the first network element.

41. (Currently Amended) An apparatus, comprising:

first message receiving means for receiving a first message from a user equipment;

forwarding means for forwarding the first message to a serving network element;

detecting means for detecting that the serving network element is out of service;

determining means for determining a type of the first message by evaluating content of a predefined information element in the first message;

sending means for sending an error message to the user equipment in dependence on the determined type of the first message received from the user equipment; and

subsequent to sending the error message to the user equipment, second message receiving means for receiving a further message of a second type different from the first message type

from the user equipment.

42. (Currently Amended) An apparatus, comprising:

receiving means for receiving an error message from a first network element in a communications network in response to a first message, the error message indicating that a serving network element for the apparatus is out of service[[,]]; and

sending means for sending a further message of a second type different from the ~~first message~~ type of the first message to the first network element in response to the error message.

43. (Currently Amended) An apparatus, comprising:

determining means for determining that a first network element in a communications network is out of service by sending a request from the apparatus to the first network element and determining that no response has been received from the first network element at the apparatus;

when the first network element is determined to be out of service, dropping means for dropping a bearer for signaling between the apparatus and a communications network comprising the first network element;

discovering means for discovering or selecting at the apparatus a second network element; and

sending means for sending from the apparatus to the second network element a message comprising an initial request for registration at the communications network.

44. (Currently Amended) A computer readable medium configured to store instructions of a computer program that when executed controls a ~~processor~~controller to perform:

receiving at a first network element in a communications network a first message from a user equipment;

transmitting the first message from the first network element to a serving network element;

detecting at the first network element that the serving network element is out of service;

determining at the first network element a type of the first message by evaluating content of a predefined information element in the first message;

in dependence on the determined type of the first message, sending from the first network element to the user equipment an error message including an indication that the serving network element is out of service; and
subsequent to sending the error message to the user equipment, receiving a second message from the user equipment of a second type different from the first message type.

45. (Currently Amended) A computer readable medium configured to store instructions of a computer program that when executed controls a ~~processor~~controller to perform:
~~receiving at a~~sending from user equipment a first message to a first network element;
detecting at the user equipment that the first network element is out of service;
dropping a signalling bearer from the user equipment to a communications network comprising the user equipment and the first network element;
selecting or discovering at the user equipment a second network element in the communications network; and
sending from the user equipment to the second network element a message comprising an initial registration request.

46. (New) An apparatus according to claim 19, wherein the controller is further configured to detect that a predetermined time period has passed since the forwarding of the message from the apparatus to the serving network element and before a response has been received from the serving network element and/or determining that the first message has been transmitted a predetermined number of times.

47. (New) A computer readable medium configured to store instructions of a computer program that when executed controls a controller to perform:
receiving an error message from a first network element in a communications network in response to a first message, the error message indication that a serving network element for a user equipment is out of service; and
in response to the error message, sending a further message of a second type different from the type of the first message to the first network element.